

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-25. Please add new claims 26-51.

1-25. Canceled.

26. (New) A method for treating and/or preventing a fibrotic disease comprising administering to a patient in need of treatment therefor a therapeutically effect amount of a substance selected from the group consisting of:
- a) a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 4;
 - b) a polypeptide comprising amino acids 22 to 401 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - c) a polypeptide comprising one, two, three or four cysteine-rich domains of osteoprotegerin;
 - d) a polypeptide comprising amino acids 22 to 194 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - e) a mutein of any of (a) to (d), wherein the amino acid sequence has at least 40 % identity to at least one of the sequences in (a) to (d);
 - f) a mutein of any of (a) to (d) which is encoded by a DNA sequence which hybridizes to the complement of the DNA sequence encoding any of (a) to (d) under moderately stringent conditions or under highly stringent conditions;
 - g) a mutein of any of (a) to (d) wherein any changes in the amino acid sequence are conservative amino acid substitutions to the amino acid sequences in. (a) to (d); and
 - h) a salt or an isoform, fused protein, functional derivative, active fraction or circularly permuted derivative of any of (a) to (g).
27. (New) The method of claim 26, wherein the fibrotic disease is a connective tissue disease.
28. (New) The method of claim 26, wherein the fibrotic disease is scleroderma.

29. (New) The method of claim 26, wherein the substance is a monomer or dimer.
30. (New) The method of claim 29, wherein the substance is glycosylated at one or more sites.
31. (New) The method of claim 30, wherein the substance is a fused protein and wherein the fused protein comprises an immunoglobulin (Ig) fusion.
32. (New) The method of claim 31, wherein the Ig fusion is an Fc fusion.
33. (New) The method of claim 26, wherein the functional derivative comprises at least one moiety attached to one or more functional groups, which occur as one or more side chains on the amino acid residues.
34. (New) The method of claim 33, wherein the moiety is a polyethylene glycol moiety.
35. (New) A method of treating and/or preventing a fibrotic disease comprising administering to a patient in need of treatment therefor a therapeutically effective amount of a nucleic acid molecule comprising a nucleic acid sequence encoding a polypeptide selected from the group consisting of:
- a) a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 4;
 - b) a polypeptide comprising amino acids 22 to 401 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - c) a polypeptide comprising one, two, three or four cysteine-rich domains of osteoprotegerin;
 - d) a polypeptide comprising amino acids 22 to 194 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - e) a mutein of any of (a) to (d), wherein the amino acid sequence has at least 40% identity to at least one of the sequences in (a) to (d);
 - f) a mutein of any of (a) to (d) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding any of (a) to (d) under moderately stringent conditions or under highly stringent conditions;

- g) a mutein of any of (a) to (d) wherein any changes in the amino acid sequence are conservative amino acid substitutions to the amino acid sequences in (a) to (d);
and
 - h) an isoform, fused protein or active fraction of any of (a) to (g).
36. (New) The method of claim 35, wherein the fibrotic disease is a connective tissue disease.
37. (New) The method of claim 35, wherein the fibrotic disease is scleroderma.
38. (New) The method of claim 35, wherein the nucleic acid molecule comprises an expression vector sequence.
39. (New) The method of claim 38, wherein the vector sequence is a gene therapy vector sequence.
40. (New) A method of treating and/or preventing a fibrotic disease, comprising administering a vector to induce and/or enhance the endogenous production of a polypeptide selected from the group consisting of:
- a) a polypeptide comprising SEQ ID NO: 2 or SEQ ID NO: 4;
 - b) a polypeptide comprising amino acids 22 to 401 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - c) a polypeptide comprising one, two, three or four cysteine-rich domains of osteoprotegerin;
 - d) a polypeptide comprising amino acids 22 to 194 of SEQ ID NO: 2 or SEQ ID NO: 4;
 - e) a mutein of (a) to (d), wherein the amino acid sequence has at least 40% identity to at least one of the sequences in (a) to (d);
 - f) a mutein of (a) to (d) which is encoded by a DNA sequence which hybridizes to the complement of the DNA sequence encoding any of (a) to (d) under moderately stringent conditions or under highly stringent conditions;

- g) a mutein of (a) to (d) wherein any changes in the amino acid sequences are conservative amino acid substitutions to the amino acid sequences in (a) to (d);
and
 - h) a salt or an isoform, fused protein, functional derivative, active fraction or circularly permuted derivative of (a) to (g).
41. (New) The method of claim 35, wherein the nucleic acid molecule is produced by a cell.
42. (New) The method of claim 26, wherein the substance is produced by a cell.
43. (New) The method of claim 26, wherein the substance is produced by a cell genetically modified to produce said substance.
44. (New) The method of claim 26 or claim 35, further comprising simultaneously, sequentially, or separately administering an interferon.
45. (New) The method of claim 44, wherein the interferon is interferon- β .
46. (New) The method of claim 26 or claim 35, further comprising simultaneously, sequentially, or separately administering a Tumor Necrosis Factor (TNF) antagonist.
47. (New) The method of claim 46, wherein the TNF antagonist is TBPI and/or TBPII.
48. (New) The method of claim 26 or claim 35, further comprising simultaneously, sequentially, or separately administering an anti-scleroderma agent.
49. (New) The method of claim 40, wherein the anti-scleroderma agent is selected from the group consisting of halofuginone, ACE inhibitors, calcium channel blockers, proton pump inhibitors, non-steroidal anti-inflammatory drugs, COX-inhibitors, corticosteroids, tetracycline, pentoxifylline, bucillamine, geranylgeranyl transferase inhibitors, rotterlin, prolyl-4-hydroxylase inhibitors, c-proteinase inhibitors, lysyl-oxidase inhibitors, relaxin,

prostaglandins, prostacyclins, endothelin-1, nitric oxide, angiotensin II inhibitors, anti-oxidants and SARP-1.

50. (New) The method of claim 40, wherein the fibrotic disease is a connective tissue disease.
51. (New) The method of claim 40, wherein the fibrotic disease is scleroderma.